March X, 2015

Dear Veterinary Colleagues,

I am asking for your help in alerting us to cases of acute hepatic failure in dogs, potentially associated with ingestion (or other exposure) to mussels.

A mussel is a filter feeder; during the filtering process, mussels can bioaccumulate harmful substances such as toxins and pollutants. Toxins produced by cyanobacteria (blue-green algae) are one group of toxins that can bioaccumulate in mussels and can result in hepatotoxicity in animals exposed to them. Dogs can develop vomiting, diarrhea and liver damage within minutes to hours following exposure to these toxins.

In 2014, there were several reports in the media of acute hepatic failure in dogs known to have eaten or otherwise been exposed to mussels. In 2015, the Maryland Departments of the Environment (MDE), Natural Resources (DNR), and Health and Mental Hygiene (DHMH) would like to be made aware of similar cases in as timely a fashion as possible, so an investigation can be initiated and appropriate specimens (both clinical and environmental) can be collected.

If you have a dog present to your clinic in acute hepatic failure, with the suggestion that the animal may have eaten or otherwise been exposed to mussels, we are asking that you:

- Complete the attached questionnaire regarding the dog's illness, exposures to mussels and other toxicants, and exposure locations.
- If there is possible mussel exposure, call the DHMH help line at 866-703-3266.

DHMH, MDE and DNR will discuss the case with you to determine if testing for toxins is indicated. If testing is indicated, we will provide instructions for specimen collection and testing. MDE and DNR scientists can also conduct environmental sampling, if indicated.

Thank you for your assistance. Please contact the DHMH help line (866-703-3266) if you have any questions regarding this matter.

Carl Rogge, VMD

For more information about harmful algal blooms, please see: http://phpa.dhmh.maryland.gov/OEHFP/EH/SitePages/harmful-algae-blooms.aspx http://www.dnr.state.md.us/bay/hab/#FAQ HAB